

SP

Notice of Allowability	Application No.	Applicant(s)	
	09/922,019	GU, JIAN	
	Examiner	Art Unit	
	Khanh Tran	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the Amendment filed on 07/07/2006.
2. ☒ The allowed claim(s) is/are 1-4,6-20,22-27,29-33,35-43 and 45-71.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

Art Unit: 2611

1. The Amendment filed on 07/07/2006 has been entered. Claims 1-4, 6-20, 22-27, 29-33, 35-43 and 45-71 are pending in this Office action.

2. Claims have been renumbered as shown below, respectively:

claim 6 renumbered as claim 5;

claims 7-10 renumbered as claims 6-9;

claim 12 renumbered as claim 10;

claim 14 renumbered as claim 12;

claims 16-20 renumbered as claims 13-17;

claim 22 renumbered as claim 18;

claim 23 renumbered as claim 19;

claim 13 renumbered as claim 20;

claim 15 renumbered as claim 21;

claims 70-71 renumbered as claims 22-23;

claims 29-33 renumbered as claims 28-32;

claim 35 renumbered as claim 33;

claim 37 renumbered as claim 34;

claim 36 renumbered as claim 35;

claims 38-42 renumbered as claims 36-40;

claims 45-46 renumbered as claims 41-42;

claims 47-48 renumbered as claims 44-45;

claim 59 renumbered as claim 46;
claims 49-54 renumbered as claims 47-52;
claim 60 renumbered as claim 53;
claim 55 renumbered as claim 54;
claim 56 renumbered as claim 55;
claim 57 renumbered as claim 56;
claim 58 renumbered as claim 57;
claims 61-62 renumbered as claims 58-59;
claim 65 renumbered as claim 60;
claim 63 renumbered as claim 61;
claim 66 renumbered as claim 62;
claim 64 renumbered as claim 63;
claim 67 renumbered as claim 64;
claim 68 renumbered as claim 65; and
claim 69 renumbered as claim 66.

Response to Arguments

3. Applicant's arguments, see pages 16-18 in Applicant's Remarks, filed on 07/07/2006, with respect to claims 1, 3-7, 9-12, 15, 24, 26-30, 32-35 and 38 have been fully considered and are persuasive. The rejection of claims 1, 3-7, 9-12, 15, 24, 26-30, 32-35 and 38 has been withdrawn.

Art Unit: 2611

4. The objection of claims 14 and 16 has been withdrawn after claims were amended to correct all informalities.

Reasons for Allowance

The following is an examiner's statement of reasons for allowance:

5. Regarding claim 1, claim is allowable after Applicant amended significantly and the scope has been further specified to include uniquely distinct features "a first balancer to generate a first balancing signal from a first balancing parameter and a first signal of a first index corresponding to a first frequency ..." and "a first combiner coupled to the first balancer to combine the first balancing signal and a second signal of a second index corresponding to a second frequency, the second frequency being symmetrical to the first frequency with respect to a center frequency in a multi-carrier signal, the first combiner generating a first balanced signal corresponding to the second frequency".

6. Regarding claim 24, claim is allowable after Applicant amended significantly and the scope has been further specified to include uniquely distinct features "generating a first balancing signal from a first balancing parameter and a first signal of a first index corresponding to a first frequency using a first balancer" and "combining the first balancing signal and a second signal of a second index corresponding to a second frequency using a first combiner, the second signal being provided by a second

Art Unit: 2611

subcarrier demodulator operating at the second frequency and the second frequency being symmetrical to the first frequency with respect to a center frequency in a multi-carrier signal, the first combiner generating a first balanced signal corresponding to the second frequency".

7. Regarding claim 38, claim is allowable after Applicant amended significantly and the scope has been further specified to include uniquely distinct features "generating a first balancing signal from a first balancing parameter and a first signal of a first index corresponding to a first frequency using a first balancer" and "combining the first balancing signal and a second signal of a second index corresponding to a second frequency using a first combiner, the second frequency being symmetrical to the first frequency with respect to a center frequency in a multi-carrier signal, the first combiner generating a first balanced signal corresponding to the second frequency".

8. Regarding claims 47 and 61, claims are allowed over prior art of record because the cited references (Isaksson US 5,726,973) cannot teach or suggest a system comprising "a balancing unit coupled to the bank of demodulators to restore 2P original signals from the 2P demodulated signals, the balancing unit including P basic blocks, each of the basic blocks as set forth in the claimed invention".

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

Art Unit: 2611

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh Tran whose telephone number is 571-272-3007. The examiner can normally be reached on Monday - Friday from 08:00 AM - 05:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on 571-272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KCT

Khanh Cong Tran

09/21/2006

Primary Examiner KHANH TRAN